



**POLICY REPORT**

Report Date: December 3, 2009  
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Meeting Date: February 4, 2010

**TO:** Standing Committee on Planning and Environment  
**FROM:** The Manager of Sustainability in consultation with the Director of Planning  
**SUBJECT:** Green Rezoning Policy

**RECOMMENDATION**

- A. THAT Council adopt the rezoning policy generally in accordance with Appendix A: Citywide Green Rezoning Policy;
- B. THAT the effective date of implementation of the above referenced Citywide Rezoning Policy to be July 30<sup>th</sup> 2010 to ensure that adequate consultation with the development industry on how the added costs associated with the Policy will be addressed in rezoning negotiations, and the possibility of adding full LEED Gold certification to the requirements;
- C. THAT Staff report back to Council before July 30<sup>th</sup> 2010 on how the City can partner with the development community to promote green building leaders through this unique public/private program, ensure that various parties' needs are being adequately addressed, and on a process to ensure that the Citywide Green Rezoning Policy is being adapted over time to respond to upgrades in building policy, new technologies and market trends.

**CITY MANAGER'S COMMENTS**

The City Manager RECOMENDS approval of A, B, and C. Achieving LEED™ Gold Buildings through rezonings will align Vancouver with other global green building leaders such as Seattle, Portland, Boston, Chicago and London. The recommendations also support Council objectives regarding green economic development and support for local "Green Capital".

**COUNCIL POLICY**

In May 2007, Council adopted the Building By-law which included environmental protection objectives. Although no new "green building" requirements were added to the by-law at that

time, the environmental protection objectives were put into place to facilitate the future development of the Green Building Strategy. Council directed staff to report back on the development of this strategy.

In June 2007, Council adopted long-range climate protection targets to reduce greenhouse gas emissions by 33% from 2007 levels by 2020 and 80% from 2007 levels by 2050.

In September 2007, Council adopted a revised long-range climate protection target to reduce greenhouse gas emissions by 80% from 1990 levels by 2050.

In June 2007, Council adopted a target of having all new buildings in Vancouver be carbon neutral by 2030.

June 2008, as part of the Green Homes Program, Council adopted a set of Building By-law amendments directed at reducing the environmental impacts of new one and two family dwellings. The amendments made the Vancouver Building By-law one of the "greenest" building codes for one and two family dwellings in the world. An expressed goal of the program was to bring all new residential wood-frame construction up to Energuide 80.

On June 10, 2008, Council unanimously approved the EcoDensity Charter and the majority of the proposed Initial Actions, including Action A-1 requiring all rezonings to be LEED Silver™ equivalent and consideration of moving to LEED Gold™ in 2010 the subject of this report.

In November 2008, Council passed a motion to remove five barriers to green building approaches and directed staff to report back when other barriers were identified and removed.

May 2009, Council endorsed the Passive Design Toolkits as official City of Vancouver publications and approved the City of Vancouver Passive Design Program.

October 2009, Council received the Mayor's Greenest City Action Team (GCAT) 2020 report and directed the City Manager to work with staff and report back with recommendations on practical implementation steps to meet the targets set out in the report.

## SUMMARY

This report follows up on the Council adoption of EcoDensity Action item A-1 and recommends Council raise the LEED™ Silver and BuiltGreen™ BC Gold (Energuide 80) equivalency requirements currently in place for rezonings to LEED™ Gold registration and equivalency and BuiltGreen™ BC Gold registration (Energuide 82), effective January 1<sup>st</sup>, 2010. There is also a recommendation that Council provide a 6 month grace period to new rezonings to allow additional time for the industry to adjust, and for adequate consultation to occur to address three items:

- Industry concerns over how the added costs of these new standards will be dealt with
- The feasibility of requiring certification as a part of the policy
- An ongoing process whereby the rezoning policy can be assessed and updated to respond to new technology, changing market conditions and advances in city wide building policy

The results of this consultation will be brought to Council prior to the end of the grace period.

## PURPOSE

The purpose of this report is to recommend a change in policy to require a higher green building standard for rezonings. This will help the City achieve the green building objectives as outlined in the May 2007 Green Building Strategy report and help further inform ongoing development of green building policy work. The recommendations will also:

- move the City closer to its objective of carbon neutral new construction by 2030, and
- continue to develop the City of Vancouver as a centre of excellence for green design and construction, while
- contributing to the overall livability and value of the City's building stock.

## BACKGROUND

Council has adopted a series of ambitious targets for greenhouse gas (GHG) reductions including targets to reduce community GHG emissions by 33% below current levels by 2020 and 80% below 1990 levels by 2050 to reflect and support adopted provincial targets. In addition to these, Council adopted the target of having all new construction in Vancouver be GHG neutral by 2030.

As part of approved EcoDensity Action A-1, Council directed staff to, "*undertake consultation and education with the development industry, and report back to Council with recommendations, with the intent of raising the LEED™ and BuiltGreen™ BC equivalency requirements in this policy to LEED™ Gold and BuiltGreen™ BC Platinum on January 1st, 2010*"

Since adoption of EcoDensity Action Item A-1, the following policies in support of green buildings have been approved by Council:

1. **Removal of Barriers to Green Building** - This program made 5 changes to the Vancouver Zoning and Development By-law, that removed barriers or punitive floor space calculations for passive design, green roofs, on-site renewable energy and recycling storage
2. **Electric Vehicle Charging** - Amendments were made the Building By-law requiring infrastructure for electric vehicle charging in 20% of parking stalls in multi-unit residential buildings.
3. **Lowered Parking Standards** - The new standard lowered the Downtown standard by up to 65% and the Downtown South standard by more than 50%, and increased incentives for developers to provide car share vehicles and spaces.
4. **Increased Standards for Off-Street Bike Parking** - This program increased number of required Bicycle storage spaces, increased security requirements of these spaces, and required provision of electrical outlets for the charging of electric bikes.
5. **Development of the Passive Design Toolkits** - creation of passive design educational materials for the design community to encourage more energy efficient buildings.

Education and consultation on green building strategies has been underway as part of the outreach to local design firms with the Passive Design Toolkits.

In addition to existing green building policies, for the past 7 years (Since 2003) the City has required LEED™ Gold certification for all civic buildings larger than 500m<sup>2</sup>, and required a minimum LEED™ Silver equivalency for all buildings in Southeast False Creek (SEFC). With the

completion of Olympic Venues and The SEFC Athletes Village there will be over 1.7 million square feet currently targeting either LEED™ Gold or Platinum certification.

## DISCUSSION

This policy represents another step along the policy continuum to a carbon neutral future, and provides Staff with a tool to research and further advance city wide policy as it relates to green building.

The City currently requires all rezonings to meet LEED™ Silver equivalency or BuiltGreen™ BC Gold equivalency with a minimum Energuide score of 80. This requires developers to show their development meets the equivalent of a minimum of 33 points in the LEED Canada NC-1™ system (with a minimum of 3 optimize energy performance points, 1 water efficiency point, and 1 storm water point) or 100 BuiltGreen™ points. To ensure follow-through in the development permit stage, at the time of rezoning, a condition of development is approved requiring LEED™ Silver or BuiltGreen™ BC Gold equivalency with Energuide 80.

This report recommends changing the policy for rezonings as follows:

- Buildings that are eligible to participate in LEED™ NC-1 will be required to register for LEED Canada NC-1™ and meet a minimum LEED™ Gold equivalency (minimum of 39 points with a minimum of 6 optimize energy performance points, 1 water efficiency point, and 1 storm water point).
- Commercial Buildings may alternatively register for LEED ‘Core and Shell’™ if more applicable, but must also meet LEED™ Gold equivalency (with a minimum of 6 optimize energy performance points, 1 water efficiency point, and 1 storm water point).
- Buildings not eligible for LEED™ NC-1 shall still achieve a minimum of BuiltGreen™ BC Gold (Minimum of 100 BuiltGreenTM points) but with a minimum Energuide score of 82.

Changing the requirements to LEED™ Gold and requiring LEED™ registration and BuiltGreen™ BC registration is an important step towards the City's goal of reduced GHG emissions and to the overall “greening” of the city’s building stock.

The BuiltGreen™ BC standard is kept at Gold while the minimum Energuide rating is raised to 82 to reflect the City's priority of reducing GHG emissions. In reviewing the standard and how it has been implemented to date staff have determined that BuiltGreen™ Gold is the appropriate target for the general sustainability attributes of a building. It requires that a building achieve 100 Built green points on the BuiltGreen™ checklist which ensures that applicants will have to comprehensively address issues such as water conservation, site considerations, internal environmental quality and waste. Raising the Energuide score to 82 will not only align developments with council GHG objectives but helps to build industry capacity in energy efficiency prior to future code updates that are targeting higher Energuide equivalent scores.

The change in policy to require LEED™ registration reconciles the fact that most rezoning applicants are using Canadian Green Building Council (CaGBC) intellectual property (LEED™ checklists) without registering or applying for certification. This recommendation ensures that

important stakeholders such the CAGBC and the Canadian Homebuilders association are adequately protected. This move also allows developers to access some of the marketing benefit that was previously unavailable if registration was not undertaken, and it is hoped that increased registration may also lead to more buildings being certified.

The costs for registration of a project under LEED NC-1 in British Columbia are modest. A 350,000 square foot (32,516 square meter) project with full energy review for a non CaGBC member including GST/HST is \$4,200. This one time fee will allow staff to better track the progress of rezonings affected by this policy and better manage the program. Registration may also help to reduce workload for City Staff as documentation of LEED™ points submitted to the City will be more standardized and faster to review. Being a registered project will also allow developers access the LEED brand for marketing purposes and allow them to access CaGBC resources with regards to credit interpretation.

Staff estimate there is a 5-7.5% cost premium in constructing LEED™ Gold buildings when compared to standard construction. It represents a premium of 1-2% over the current policy of achieving LEED Silver equivalency. These additional hard costs are not considered to be a public benefit (i.e. in terms of a rezoning Community Amenity Contribution). However, the added cost of going to LEED Gold will be considered in the pro-forma as with other City requirements and therefore nominally reduce the overall ‘land lift’ and impact indirectly the City’s ability to negotiate other public benefits. The benefit is that this initiative will assist in supporting further development Vancouver’s green building capacity, GHG reduction, and ensure better long term affordability for residents and businesses.

The overall policy of requiring higher “green” building standards for rezoning is based on the principle that where development rights are being requested beyond what is zoned for the site, it is reasonable for Council to require a higher standard for that development. Rezonings have also proven a good mechanism for implementing new green building standards because any added costs of green design and construction can be absorbed as part of the rezoning. The development of the policy can also be managed on a case by case basis with greater support from staff and allow better for contextual responses to LEED requirements. Staff’s experience with using rezonings as a tool to advance broader sustainability policy has been a large part of the reason that Vancouver has been able to move more quickly than its contemporaries in this area.

This policy would apply to all new rezonings submitted after July 31st, 2010. Sustainability Group staff have worked with the Urban Design and Development Planning Centre and Development Services Staff to ensure staff are qualified to handle this change in requirements. Since the initial adoption of EcoDensity Action Item A1, approximately 45 staff members in Planning, Development Services, and the Chief Building Official office have taken LEED™ training. The City now has more LEED accredited staff than any other jurisdiction in the country. It is noted that there will be staff resource capacity implications as it will become necessary to undertake additional review efforts to evaluate the LEED Gold status of each rezoning application. As part of the Recommendation C report back, staff will review capacity and cost recovery, where applicable.

This action represents a new requirement of rezonings, and by itself does not supersede or negate any rezoning considerations otherwise directed by existing policy.

## **CONSULTATION**

Targeted consultation has been done with the design community with respect to this policy. In this process nine different architectural, engineering and quantity surveying firms were interviewed to ensure that approximate costs were vetted that and requirements were aligned with the capabilities of the local industry.

Staff have met with the Urban Development Institute (UDI) on 3 occasions to consult on the development and implementation of this policy. UDI felt that more time was required to ensure that the development industry was adequately notified about this evolution in policy. They also felt that additional consultation was needed to ensure that costs were being adequately accounted for in rezoning negotiations.

Staff agreed with this position and will undertake further consultation with development industry before July 30<sup>th</sup> 2010 to ensure that all industry concerns that can be addressed are addressed. Staff will consult with industry to develop a mutually understood framework for accounting for any increased costs and benefits of this policy. The secondary purpose of this ongoing consultation is to further develop a partnership on this policy that incorporates LEED certification, facilitates ongoing dialogue on green building topics and increased recognition of green building leaders in the development community.

Beyond the questions raised by industry on costs and timing other general concerns were raised by UDI on how this may affect warranty providers, home owners and overall building durability. Staff disagree that these are issues given the city's own 8 year experience building and occupying millions of square feet of LEED™ Gold development, the success of other LEED™ projects in the region, and the proliferation of LEED™ as a best practice for building internationally.

## **FINANCIAL IMPLICATIONS**

With this report's recommendations, there is no impact on City budgets or personnel requirements. Relevant City staff are already trained in LEED™ standards. BuiltGreen™ is a self-policed standard. As noted above in 'Discussion' any future impact on staff capacity will be reviewed and reported, as part of the Recommendation C report back to Council, with a cost recovery approach applied, where applicable.

## **ENVIRONMENTAL IMPLICATIONS**

Increased green building standards as outlined in this report will assist in reducing building-related greenhouse gases, energy consumption, potable water use, storm-water runoff, harmful indoor air quality, and material waste in Vancouver.

## **COMMUNICATIONS PLAN**

If approved, the Sustainability Group will work with staff from the Rezoning Centre to draft a bulletin regarding the changes proposed in this report.

## **CONCLUSION**

This report recommends all rezonings be required to establish designs that would achieve a minimum equivalent of LEED™ Gold (or BuiltGreen™ Gold with an Energuide score of 82 if

LEED™ does not apply). This report also recommends requiring LEED™ registration. If approved, this policy will result in greater adoption of these better building practices, which will contribute to lower resource use, GHG emissions and healthier homes. This policy and commitment to increased consultation and partnership with industry on green building represents a step toward the City of Vancouver's commitment to carbon neutrality for all new building by 2030.

\* \* \* \*

**Proposed City of Vancouver “Green” Building Rezoning Policy:**

THAT it be Council Policy effective <Insert Council Approved Date>, 2010 that all rezonings for buildings that meet the minimum requirements to participate in the New Construction (NC-1) program, be required to establish designs that would achieve a minimum equivalent of LEED™ Gold, with a minimum of 6 optimize energy performance points, 1 water efficiency point, and 1 storm water point. Buildings will also be required to register in the LEED™ program. Certification is encouraged but not required.

Buildings that are not eligible to participate in LEED™ NC-1 due to form of development shall achieve a minimum of BuiltGreen™ BC Gold with a score of Energuide 82, or an equivalent achievement in green design. The City will negotiate an equivalent green standard for buildings that are ineligible to participate in either LEED™ or BuiltGreen™ BC. The application of this policy shall emphasize approaches that use passive design practices to reduce energy need before the application of green energy technologies, as outlined in the City of Vancouver Passive Design Toolkits.

This change in policy does not apply to Heritage Revitalization Agreements (HRAs) where density is being increased. As with rezonings, HRAs often have both heritage aspects and new development aspects. For heritage components in either HRAs or rezonings, the increased LEED™ equivalency requirement will not directly apply, however reasonable design efforts shall be made to improve green performance where appropriate while respecting heritage aspirations and promoting heritage retention.